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TECHNICAL INFORMATION

for

COUPLER ASSEMBLY

MODEL A1125



THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, N. Y.

OTTAWA, CANADA

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C O M M U N I C A T I O N S E N G I N E E R S

700 FENIMORE ROAD

MAMARONECK, N. Y.

W a r r a n t y

The Technical Materiel Corporation, hereinafter referred to as TMC, warrants the equipment (except electron tubes,* fuses, lamps, batteries and articles made of glass or other fragile or other expendable materials) purchased hereunder to be free from defect in materials and workmanship under normal use and service, when used for the purposes for which the same is designed, for a period of one year from the date of delivery F.O.B. factory. TMC further warrants that the equipment will perform in a manner equal to or better than published technical specifications as amended by any additions or corrections thereto accompanying the formal equipment offer.

TMC will replace or repair any such defective items, F.O.B. factory, which may fail within the stated warranty period, PROVIDED:

1. That any claim of defect under this warranty is made within sixty (60) days after discovery thereof and that inspection by TMC, if required, indicates the validity of such claim to TMC's satisfaction.
2. That the defect is not the result of damage incurred in shipment from or to the factory.
3. That the equipment has not been altered in any way either as to design or use whether by replacement parts not supplied or approved by TMC, or otherwise.
4. That any equipment or accessories furnished but not manufactured by TMC, or not of TMC design shall be subject only to such adjustments as TMC may obtain from the supplier thereof.

Electron tubes* furnished by TMC, but manufactured by others, bear only the warranty given by such other manufacturers. Electron tube warranty claims should be made directly to the manufacturer of such tubes.

TMC's obligation under this warranty is limited to the repair or replacement of defective parts with the exceptions noted above.

At TMC's option any defective part or equipment which fails within the warranty period shall be returned to TMC's factory for inspection, properly packed with shipping charges prepaid. No parts or equipment shall be returned to TMC, unless a return authorization is issued by TMC.

No warranties, express or implied, other than those specifically set forth herein shall be applicable to any equipment manufactured or furnished by TMC and the foregoing warranty shall constitute the Buyers sole right and remedy. In no event does TMC assume any liability for consequential damages, or for loss, damage or expense directly or indirectly arising from the use of TMC Products, or any inability to use them either separately or in combination with other equipment or materials or from any other cause.

*Electron tubes also include semi-conductor devices.

FOREWORD

The Technical Materiel Corporation's Coupler Assembly model A1125, is identical to the Dipole Antenna Coupler model DAC-12. Information listed in Technical Bulletin 8013 for the model DAC-12 also applies to the Coupler Assembly model A1125.



TECHNICAL BULLETIN NUMBER 8013

Dipole Antenna Coupler
TMC Models DAC



- 2 to 32 mcs
- Built-in lightning arrester
- Weather resistant
- Sealed fiberglass reinforced plastic case
- Stainless steel connector rings
- 2,000 pound tensile strength

The Technical Materiel Corporation's Dipole Antenna Couplers, Models DAC are impedance matching devices, each providing a balanced connection for the center of a receiving dipole to 50 and 70 ohm unbalanced connections for coaxial transmission lines. An included chart shows models to meet various transmission requirements. The transformers used in Models DAC provide flat response over a wide frequency range, obviously however dipole antennas are constructed for finite frequencies, therefore impedance match from the antenna to the coaxial transmission line is a function of the frequency for which the dipole is cut.

Dipole Antenna Coupler

Stainless steel connector rings are provided for the antenna connector and for messenger tie points. The entire unit is contained within a sealed fiberglass reinforced plastic case, and additional strength and weather resistance is provided by "potting" the transformer and connectors in a plastic compound. A built-in lightning arrester prevents the accumulation of static charges which otherwise might injure associated equipment.

A tensile test of a sample DAC was conducted by a leading research laboratory to determine amount of applied tensile stress needed to damage sample. The sample successfully passed a tensile strain of 2,000 pounds between each of the antenna eye-bolts.

TECHNICAL SPECIFICATIONS, TMC MODELS DAC

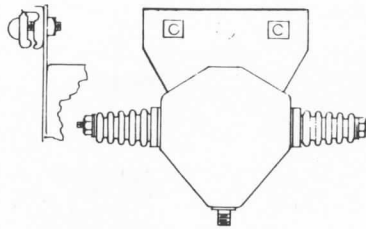
TRANSFORMER FREQUENCY RESPONSE:	Flat within ± 1.5 db throughout the frequency range.
EQUIPMENT CASE:	Reinforced fiberglass pastic.
INPUT TERMINALS:	Standard ring type.
IMPEDANCE MATCH:	See chart.
DIMENSIONS:	Maximum over-all, including all terminals, 12 $\frac{1}{2}$ " wide x 7 $\frac{3}{4}$ " long x 2 $\frac{1}{4}$ " deep. Maximum case dimensions, less terminals, 4 $\frac{3}{4}$ " wide x 5 $\frac{1}{4}$ " long x 2 $\frac{1}{4}$ " deep.
WEIGHT:	3 pounds.
SHIPPING WEIGHT:	5 pounds.
COMPONENTS AND CONSTRUCTION:	Equipment is manufactured in accordance with JAN/MIL specifications wherever practicable.

TMC Models DAC

MODEL	INPUT IMP. BAL. (Nominal)	OUTPUT IMP. UNBAL. (Nominal)	FREQUENCY RANGE	OUTPUT TERM.	MATING PLUG*	TRANSFORMER
DAC-1	70 ohms	70 ohms	2 to 32 mcs	UG-58A/U	UG-21B/U Type N	TR-030
DAC-2	300 ohms	70 ohms	2 to 32 mcs	UG-58A/U	UG-21B/U Type N	TR-119
DAC-3	200 ohms	70 ohms	2 to 32 mcs	UG-58A/U	UG-260/U Type BNC	TR-039
DAC-4	200 ohms	70 ohms	2 to 32 mcs	UG-58A/U	UG-260/U Type BNC	TR-068
DAC-5	70 ohms	70 ohms	2 to 32 mcs	UG-103/U	UG-102/U Type UHF	TR-030
DAC-6	70 ohms	50 ohms	2 to 30 mcs	UG-58A/U	UG-21B/U Type N	TR-120
†DAC-8	70 ohms	50 ohms	2 to 30 mcs	UG-58A/U	UG-21B/U Type N	TR-120
DAC-9	475 ohms	50 ohms	2 to 30 mcs	UG-58A/U	UG-21B/U Type N	TR-010
DAC-10				UG-58A/U	UG-21B/U	Less Transformer
DAC-12				UG-58A/U	UG-21B/U	One insulator less trans- former, for end-fed antenna TX and RX.
†DAC-13	200 ohms	50 ohms	2 to 32 mcs	UG-58A/U	UG-21B/U Type N	TR-039
DAC-14	200 ohms	50 ohms	2 to 30 mcs	Fitted with SO-239 & PL-259 coax connectors		TR-091
DAC-17	600 ohms	70 ohms	2 to 30 mcs	UG-58A/U	UG-21B/U Type N	TR-072

*Mating plugs furnished.

†With pole mounting plate and hardware in place of connector rings.
(See drawing below).



Model DAC-8 and DAC-13

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